# GOVERNMENT OF INDIA
# SCIENCE AND TECHNOLOGY
# LOK SABHA

UNSTARRED QUESTION NO:6573
ANSWERED ON:09.05.2000
GREEN MANURE
MD ANWARUL HAQUE;RAGHUVANSH PRASAD SINGH

**Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:**

(a) whether attention of the Government has been drawn to the use of straw to make substances for application in the field of fuels, chemicals, fertilizers and glues etc.;

(b) if so, the details in this regard;

(c) whether the Government propose to develop any process for the commercial production of the Green Manure and other value added products; and

(d) if so, the details thereof ?

## Answer

MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY

(SHRI BACHI SINGH RAWAT )

(a) : Yes Sir.

(b) : Government is aware that straw could be converted into value added product through fast pyrolysis. This is a high temperature process in which biomass is rapidly heated upto 500oC in the absence of oxygen resulting in a dark brown liquid product. This product can be used in the development of value added products namely; fuels, chemicals, fertilizers, glues etc. The straw is used as fodder for livestock in our country. R&D projects on a limited scale have been supported to utilise other crop residues and vegetable waste to produce many value added products.

(c) : Yes Sir.

(d) : There are many ways to produce green manure. A project of M/s. T. Stanes & Co. Ltd., Coimbatore for development of a value added product similar to Green manure called as Digested Organic Supplement (DorS) enriched with micronutrients using organic residues such as crop residues and vegetable wastes as raw material has been successfully completed. A demonstration pilot plant at Madurai has been set up. This technology has been assigned by M/s. T. Stanes & Co., Coimbatore to National Research Development Corporation and is available to other entrepreneurs.